

4 Example

An ostrich that is 108 inches tall is ⁺²⁰ 20 inches taller than ^{4k} 4 times the height of a kiwi. What is the height of a kiwi in inches?

$k = \text{height of kiwi}$

$$4k + 20 = 108$$
$$\begin{array}{r} -20 \quad -20 \\ \hline \end{array}$$

$$\frac{4 \cdot k}{4} = \frac{88}{4}$$

$$k = 22$$

The kiwi is 22 inches tall.

5 Example

Paul bought a student discount card for the bus. The card allows him to buy daily bus passes for \$1.50. After one month, Paul bought 15 passes and spent a total of \$29.50. How much did he spend on the student discount card?

$A = \$ \text{ discount card}$

$$A + 15(1.50) = 29.50$$

$$A + 22.50 = 29.50$$
$$\begin{array}{r} -22.50 \quad -22.50 \\ \hline \end{array}$$

$$A = \$7$$

The bus pass is \$7.00.

6 Example

You have \$60 and your sister has \$120. You are saving \$7 per week and your sister is saving \$5 per week. How long will it be before you and your sister have the same amount of money?

$w = \#$ of weeks

$$\text{You } \$ = \text{Sister } \$$$

$$\begin{array}{r} 60 + 7w = 120 + 5w \\ -60 \quad -5w \quad -60 \quad -5w \\ \hline \end{array}$$

$$\frac{2w}{2} = \frac{60}{2}$$

$$w = 30$$

At 30 weeks you and your sister will have the same amount of money.

Closure

Explain what you have to do in order to compare two companies.